



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/854,144 | 05/11/2001 | Luc Wuidart | S1022/8663 | 6803 |

23628 7590 07/07/2004

WOLF GREENFIELD & SACKS, PC
FEDERAL RESERVE PLAZA
600 ATLANTIC AVENUE
BOSTON, MA 02210-2211

EXAMINER

BROWN, VERNAL U

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2635

DATE MAILED: 07/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/854,144

Applicant(s)

WUIDART, LUC

Examiner

Vernal U Brown

Art Unit

2635

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 May 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☒ Claim(s) 6-8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 May 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6.7.8.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

The application Wuidart et al. for Validation of the Presence of an electromagnetic transponder in the field of an amplitude demodulation reader filed May 11, 2001 has been examined. Claims 1-8 are pending.

Drawings

Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art in view of in view of Ikefuji et al. U.S Patent 6654466 and further in view of Mendelsohn U.S Patent 6335665.

Regarding claim 1, applicant's admitted prior art teaches a terminal for generating an electromagnetic field adapted to communicating with at least one transponder entering this field, including an oscillating circuit adapted to being excited by a high-frequency remote supply and an demodulator for detecting possible data transmitted by the transponder by modulating, at the

Art Unit: 2635

rate of a sub-carrier, a load that it forms on the terminal's oscillating circuit (page 1 lines 17-28).

Applicant's admitted prior art is however silent on teaching an amplitude demodulator for detecting possible data transmitted by the transponder and means for measuring variables linked to a current in the oscillating circuit and to a voltage there across, means for comparing present values of these variables to predetermined values, and means for regulating a signal phase in the oscillating circuit in response to a reference value having a long response time as compared to the sub-carrier. Ikefuji et al. in an art related interrogator and responder system teaches amplitude demodulation for detecting data transmitted by the transponder (col. 7 lines 25-30) and means for measuring variables linked to a current in the oscillating circuit and to a voltage there across by measuring the output of the resonance circuit (col. 10 lines 45-50). Ikefuji et al. also teaches varying the capacitor of the oscillating circuit (col. 13 lines 42-44), which inherently regulates the phase and changes the response time (abstract U.S. Patent Mendelsohn, 6335665). The amplitude modulation scheme is conventionally used in communication between and interrogator and the measuring of variables linked to a current in the oscillating circuit provides the means of varying the components of the oscillation circuitry in order to control the resonant frequency.

It would have been obvious to one of ordinary skill in the art to have an amplitude demodulator for detecting possible data transmitted by the transponder and means for measuring variables linked to a current in the oscillating circuit and to a voltage there across, means for comparing present values of these variables to predetermined values, and means for regulating a signal phase in the oscillating circuit in response to a reference value having a long response time as compared to the sub-carrier in the applicant's admitted prior art as evidenced by Ikefujii et al. in view of Mendelsohn because applicant's admitted prior art teaches a terminal for generating

Art Unit: 2635

an electromagnetic field adapted to communicating with at least one transponder entering this field, including an oscillating circuit adapted to being excited by a high-frequency remote supply and Ikefuji et al. in view of Mendelsohn teaches amplitude modulating the signal transmitted by the transponder to the interrogator, measuring variables linked to a current in the oscillating circuit and varying the capacitance for changing the resonant frequency which inherently regulate the phase of received signal. The amplitude modulation scheme is conventionally used in communication between and interrogator and the measuring of variables linked to a current in the oscillating circuit provides the means of varying the components of the oscillation circuitry in order to control the resonant frequency.

Regarding claims 2-4, applicant's admitted prior art is silent on teaching means for deactivating the phase regulation means and means for forcing a value of settable element of the oscillating circuit. Ikefuji et al. in an art related interrogator and responder system teaches a CPU for selectively connecting or disconnecting the capacitors to the oscillation circuit and inherently changing the phase of the received signal(col. 15 lines 20-22) which provides a means for forcing a value of a settable element of the oscillating circuit.

It would have been obvious to one of ordinary skill in the art to have means for deactivating the phase regulation means and means for forcing a value of settable element of the oscillating circuit in the applicant's admitted prior art as evidenced by Ikefuji et al. because applicant's admitted prior art suggests a terminal for generating an electromagnetic field adapted to communicating with at least one transponder entering this field, including an oscillating circuit and Ikefuji et al teaches controlling the resonance circuit of a terminal by selectively connecting

Art Unit: 2635

or disconnecting the capacitors to the oscillation circuit and inherently changing the phase of the received signal and further provides a means for forcing a value of a settable element of the oscillating circuit.

Regarding claim 5, applicant's admitted prior art is silent on teaching exploiting the results of the comparison means to detect a presence of a transponder. Ikefuji et al. in an art related interrogator and responder system teaches means for measuring variables linked to a current in the oscillating circuit and to a voltage there across by measuring the output of the resonance circuit (col. 10 lines 45-50) and the measured values are used in controlling the communication with the transponder and detecting the transponder in the electromagnetic field of the terminal (col. 11 lines 227-35).

It would have been obvious to one of ordinary skill in the art to exploiting the results of the comparison means to detect a presence of a transponder in the field of the transponder in the applicant's admitted prior art because applicant's admitted prior art suggests a terminal for generating an electromagnetic field adapted to communicating with at least one transponder entering this field and Ikefuji et al. teaches measuring variables linked to a current in the oscillating circuit and to a voltage there across by measuring the output of the resonance circuit in order to select the resonant frequency for the identification of the transponder in the electromagnetic field of the terminal.

Allowable Subject Matter

Claims 6-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claims 6-8, the prior art of record fail to teach or suggests in the absence of a useful signal of sufficient amplitude to enable detection of data by the demodulator and if a transponder has been detected by the comparison of the current and predetermined values the phase regulation means is deactivated and the predetermined values are stored in the off-load operation of the terminal.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vernal U Brown whose telephone number is 703-305-3864. The examiner can normally be reached on 8:30-6:30 Mon-Thur.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on 703-305-4704. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2635

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Vernal Brown

June 24, 2004

MICHAEL HORABIK
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

